

## **ABSTRACT OF THE DISCLOSURE**

An alignment system for aligning optical components is disclosed. The alignment system presents a kinematic, de-coupled alignment solution that facilitates rapid alignment between optical components while preserving a simple design. In one embodiment, the alignment system includes a mounting stage having a base and an alignment carriage engaged with the base. The base includes a plurality of contact points on which a spherical surface of the alignment carriage is supported. The contact points enable the alignment carriage to be rotated into a variety of positions. This in turn enables an optical component mounted to a component mount on the alignment carriage to be correspondingly maneuvered when the alignment carriage is rotated. A plurality of rotational control assemblies are employed to selectively rotate the alignment carriage in response to user input. In one embodiment, one rotational control assembly is employed for rotation about each of three orthogonal rotational axes.

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